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FREDERICK H. WAGNER, M. E.

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# COAL AND COKE

BY

FREDERICK H. WAGNER, M. E.

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To

HOWARD BRUCE, Esq.



## PREFACE

The preparation of this book was undertaken in part because of the requests for information made to the author by numerous friends engaged in the manufacture of coal gas, and in part with the desire of placing before the American student of coal gas production, data in a concise form covering the various systems of coal carbonization.

Baltimore was the first city in America to undertake to supply illuminating gas as a commercial commodity. The residents of this city were invited in 1816 to visit Peale's Museum to see the new "burning air," the name given to coal gas by the advertising agent of the museum. This exhibition took place just six months after the daily papers had announced that Covent Garden Theatre in London, as well as several streets in the English capitol, were illuminated by the burning of coal gas.

Unfortunately, coal gas manufacture received a serious setback through the advent of carburetted water-gas, and this condition has continued, until now approximately 75 per cent. of the gas manufactured is produced in the water-gas generator.

This condition is the reverse of that existing in England, which country can truly be termed the home of coal gas, and consequently the successful installation of coal gas plants in America will necessarily have to follow English practice.

English pioneers and investigators, such as the late Vivian B. Lewes, and many others, have paved the way for the revival of coal gas manufacture in this country, and there is evidence that such a revival is about due. The success of this development will depend in large measure upon the use of the great fund of knowledge covering the carbonization of coal, which has been produced by the indefatigable labors of the English pioneers and investigators.

Much information having direct bearing on the carbonization of coal is being made available by the U. S. Bureau of Mines, and its bulletins are of extreme value to the students of this subject, while the investigations undertaken by the University of Illinois are opening up new fields of research which will ultimately yield a better understanding of the subject.

I wish to express my indebtedness to the various journals from which information has been drawn, and to the authors of articles whose names are given in these pages, for the fund of knowledge placed at my disposal. I would appreciate suggestions from the readers of this book, which may lead to an extension of its usefulness in later editions.

FREDERICK H. WAGNER.

BALTIMORE, MD.,  
*January, 1916.*

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